

Amendments to the Specification:

The following paragraph replaces paragraph [0004] of the specification:

The Open Grid Services Architecture (OGSA) is a grid system architecture based on an integration of Grid and Web services concepts and technologies. It includes a community-based set of services and software libraries for providing security, information infrastructure, resource management, data management, communication, fault detection, and portability functions.

[[OSGA]] OGSA utilizes Web Services Description Language (WSDL), an XML-formatted language, to describe a Web service's capabilities for exchanging messages. OGSA includes WSDL interfaces, conventions, and service bindings that define the components required for creating complex distributed systems, such as lifetime management, change management, and notification, as well as for supporting security features. Utilizing WSDL, the [[OSGA]] OGSA architecture defines extensions to web services that specify properties for grid applications. These extensions, and their definitions in the [[OSGA]] OGSA specification, seek to provide a standard for technology such as portType relationships and serviceData in order to ensure interoperability among running grid services.

The following paragraph replaces paragraph [0005] of the specification:

The irony of [[OSGA]] OGSA is that, although meant to address a dynamic, distributed, on demand, 'utility' style of computing (i.e., grid computing), no provision is made for dynamically deploying these underlying grid services. That is, due to their being web services, the [[OSGI]] OGSI runtime environment itself, and any additional grid services an instance contains, must all be deployed using preexisting web services tools and concepts. Thus, adding and removing grid services is done using web service techniques. Among other problems, this typically requires stopping the web server, running various web service deployment tools and scripts, then restarting the web server testing, and putting it back into production. This solution is slow, error prone, and very undesirable.

The following paragraph replaces paragraph [0013] of the specification:

[[OSGA]] OGSA facilitates grid services by providing a set of well-defined interfaces and by following specific conventions. The interfaces address discovery, dynamic service creation, lifetime management, notification, and manageability; the conventions address naming. Grid services also address authorization and concurrency control. This core set of interfaces facilitates the construction of hierarchical, higher-order services that can be treated uniformly across layers of abstraction.

The following paragraph replaces paragraph [0021] of the specification:

The hosting environment selected by the grid service deployment system in response to request from one of client systems 102a-102n is referred to herein as the target hosting environment. The target hosting environment includes a target host directory (also referred to as “directory”) 110 that stores various files in sub-directories and temporary storage located therein. These files include class files 112, jar files 114, WSDL files 116, service WSDD 118, client WSDD 120, and deployedGARS file 122. Files 112-122 store artifacts provided by host system 106 with respect to an [[OSGI]] OGSI instance. A JAR file is a Java archive file that is used to hold one or more Java related files. These are most often Java class files. A Java class file (also referred to as Java byte code) is a compiled Java file that can be interpreted by a Java Virtual Machine (JVM). WSDL files are XML files that describe a web service interface and associated XML types. WSDD files are web service deployment descriptors. These files contain the details needed by the web service container or hosting environment and that is needed to make the service addressable to client applications.